

Appendix D-16A Building 515 Waste Accumulation Area

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April 27, 2005

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APPENDIX D-16A

BUILDING 515 WASTE ACCUMULATION AREA

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APPENDIX D-16A

BUILDING 515 WASTE ACCUMULATION AREA

D1. INTRODUCTION

This appendix is designed to provide information specific to the Building 515 Waste Accumulation Area (B-515 WAA), a waste storage area. This appendix is not designed to be used as a sole source of information. All general information that is not specific to the B-515 WAA is included in the Contingency Plan for Waste Accumulation Areas, dated July 2004, and should be referenced.

D1.1 General Information

Facility Name	Building 515 Waste Accumulation Area		
Department/Program	Plant Engineering		
Site Operator	Regents, University of California		
	Lawrence Livermore National Laboratory		
	P.O. Box 808		
	Livermore, CA 94551		
EPA ID No.	CA2890012584		
Location	7000 East Avenue		
	Livermore, CA 94550		
LLNL Contact	Karl Kiraly		
	Waste Accumulation Area Coordinator		
	Lawrence Livermore National Laboratory		
	P.O. Box 808 (L-606)		
	Livermore, CA 94551		
	Ph: (925) 423-2346		
Owner	U.S. Department of Energy (DOE)		
	DOE National Nuclear Security Administration (NNSA)		
	Livermore Site Office		
	PO Box 808, L-293		
	Livermore, CA 94551-0808		
DOE Contact	Dan Nakahara		
	Assistant Manager		
	Environmental Stewardship Division		
	U.S. Department of Energy		
	NNSA/Livermore Site Office		
	Phone: (925) 423-8394		

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D2. WAA DESCRIPTION

D2.1 General Information

The B-515 WAA is located in the southeast quadrant of the LLNL Main Site (see **Figure D-1**) along the west side of Building 515 (B-515). Hazardous wastes may be stored at the B-515 WAA for 90 days or less, until transferred to the appropriate Radioactive and Hazardous Waste Management (RHWM) facility or other permitted treatment, storage or disposal facility (TSDF). The design storage capacity of this WAA is 4,840 gallons.

D2.2 Physical Description

The B-515 WAA is 23 x 60-ft. It consists of an outdoor covered area with secondary containment pallets placed on an asphalt floor (see **Figure D-2**). Access to the WAA is provided through a lockable gate located at the west side of the facility.

An emergency shower/eyewash and a telephone are located along the wall of B-515, near the northeast corner of the WAA. A fire extinguisher is located along the northeast wall of the WAA. Spill kit supplies and personal protective equipment described in Section D4 are located near the northeast corner of the WAA.

D2.3 Description of Waste Handled

Table D-1 lists the waste types typically stored in the B-515 WAA. This list is intended to alert personnel to the potential hazards in the WAA, but each situation should be evaluated based on the actual materials involved. Waste is typically stored in DOT-approved containers ranging from 2-gallon cans to 55-gallon drums. All liquid wastes are stored on secondary containment pallets, which can, if necessary, be used to hold released liquid wastes. These containment pallets guarantee the separation of liquid wastes from other incompatible wastes or materials and prevent liquid waste from coming into contact with any other surface liquids.

D3. RESPONSIBILITIES

The WAA Coordinator, WAA Operator, ES&H Team 4 Leader, Environmental Operations Group (EOG) Analyst Associate, RHWM Technician, and ES&H Technician are responsible for providing information and assistance in the event of an emergency. ES&H Team 4 is the support team for the B-515 WAA. If additional support members are needed, the ES&H Team 4 Leader or EOG Analyst or Analyst Associate will notify those members. Program contacts and

ES&H Team 4 contacts are listed in **Table D-2**.

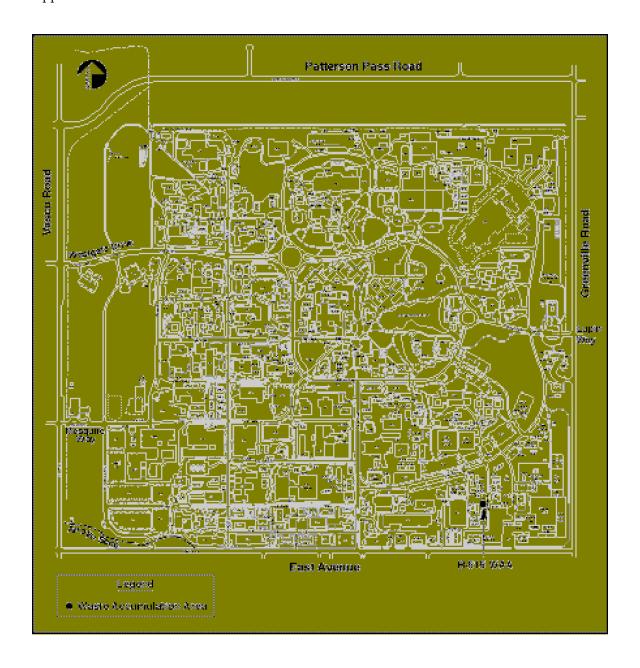


Figure D-1. Location of the Building 515 WAA at LLNL Main Site

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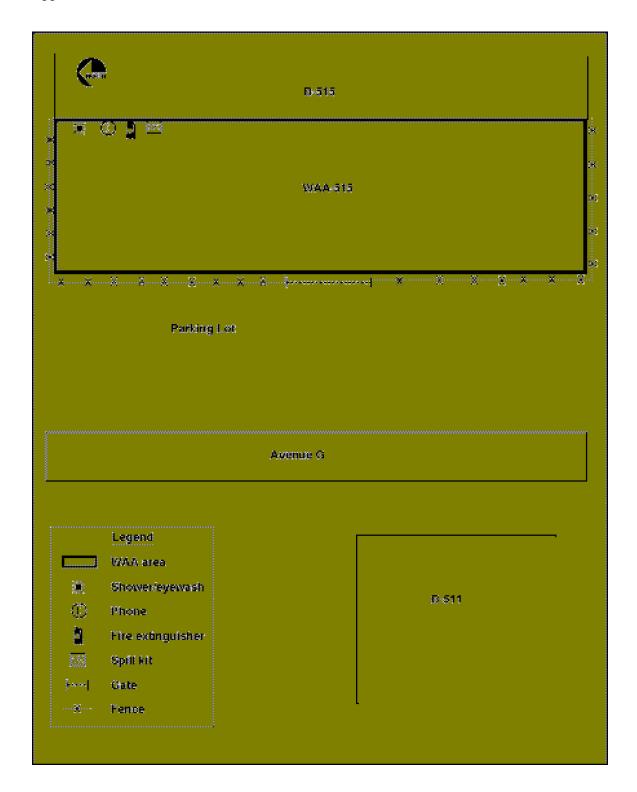


Figure D-2. The Building 515 WAA

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Table D-1. Typical Wastes Stored in the Building 515 WAA

Mercury-contaminated articles

Dirt contaminated with oils or fuel

Laboratory packed waste chemicals (reagents, spent solutions)

Laboratory waste—alkaline solutions, acid solutions, non-halogenated organic solutions, organics/metal residues

Empty containers contaminated with product residues

Laboratory waste—trash (contaminated paper and rags, protective clothing, glassware, plasticware, tubing and fittings, wood and metal parts, HEPA filters contaminated with hazardous constituents)

Berm water (rain water from waste storage yard, metals, organics)

Sludge/water removed from sewer

Metal plating (acids, metals)

Metal filings, scrap, or residues from machine shop

Print organics (copy machines, printer, print shop)

Print alkalines (copy machines, printer, print shop)

Photographic waste (fixer, developer, bleach, containing weak acids/bases with metals/organics)

Flammable liquids with impurities (gas, kerosene, and other)

Solvents/paint thinner from cleaning/degreasing operations

Waste oil (with trace gasoline, diesel, organics, metals)

Contaminated equipment (vacuum pumps, ignition tubes, photographic equipment)

Discarded capacitors containing oil

Table D-2. Program Contacts and ES&H Team 4 Contacts

Contact	Name	Phone	Pager
WAA Coordinator	Karl Kiraly	423-2346	04549
WAA Operator	Efren Sifuentes	422-7962	58848
ES&H Team 4 Leader	Bill Wells	422-9915	04010
EOG Analyst Associate	Laura Tidwell	423-2676	04061
RHWM Technician	Efren Sifuentes	422-7962	58848
ES&H Technician	Bob Gallegos	423-6997	05442

In an emergency, immediately notify the Alameda County Regional Emergency Communications Center at extension 911 or dial (925) 447-6880 if calling from off-site, cellular phone, or pay phone. If paging from off-site, cellular phone, or pay phone, dial (925) 423-7705 and pager number.

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D4. EMERGENCY EQUIPMENT

D4.1 Emergency Equipment Available at the WAA

The B-515 WAA has spill kit supplies, a fire extinguisher, personal protective equipment, and decontamination equipment. Material Safety Data Sheets (MSDSs) are available at or near the WAA; they provide general information on chemical hazards and personal protective equipment needed to manage chemicals. MSDSs may indicate the emergency actions to be taken if personnel come in contact with the chemicals. The location, type, and quantity of spill kit supplies required for the operation of the B-515 WAA are listed in **Table D-3**. Other emergency equipment required in this area is listed in **Table D-4**. The location of emergency equipment is shown in **Figure D-2**.

Table D-3. Spill Kit Supplies

Supplies	Quantity	Use	Location
Dry Sorb absorbent (silicate) or equivalent	50 lb	Contain and absorb concentrated acids, bases, solvents, oils, hydraulic fluids, PCBs, organic solvents, and coolants. NOT FOR USE ON HYDROFLUORIC ACID	Spill kit
Hydrofluoric acid spill kit	1 each	Contain, absorb, and neutralize hydrofluoric acid spills.	Spill kit
Calcium Gluconate ointment	1 tube	To apply to skin when in contact with hydrofluoric acid to neutralize reaction.	Spill kit
Polyethylene bags	20 each	Line drums and contain contaminated absorbent or other solid waste.	Spill kit
Mercury spill kit	2 each	Contain and clean up small incidents involving mercury. Follow instructions provided in spill kit.	Spill kit
Caustic spill kit	2 each	Contain and clean up small incidents involving caustics. Follow instructions provided in spill kit.	Spill kit
Acid spill kit	2 each	Contain and clean up small incidents involving acids. Follow instructions provided in spill kit. NOT FOR USE ON HYDROFLUORIC ACID	Spill kit
Flammable solvent spill kit	2 each	Contain and clean up small incidents involving solvents. Follow instructions provided in	Spill kit

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spill kit.

Table D-3. Spill Kit Supplies (Continued)

Supplies	Quantity	Use (Continued)	Location
Broom (polypropylene or equivalent)	1 each	Sweep absorbent material for placement in waste containers.	Next to fence on east side of WAA
Shovel (aluminum, propylene or equivalent), non-sparking	1 each	Scoop absorbent material for placement in waste containers.	Next to fence on east side of WAA
Bung wrench, non- sparking	1 each	Remove or replace bungs on drums.	Spill kit
Ratchet with 15/16-in. socket	1 each	Remove or replace bolts from ringtop drums.	Spill kit
Gloves – Silvershield or 4-H	5 pairs	See Appendix A ("Personal Protective Equipment") in the Contingency Plan for Waste Accumulation Areas, July 2004.	Spill kit
Gloves – neoprene or nitrile	5 pairs	See Appendix A ("Personal Protective Equipment") in the Contingency Plan for Waste Accumulation Areas, July 2004.	Spill kit
Chemically resistant protective coveralls (Chemrel or equivalent)	2 each	See Appendix A ("Personal Protective Equipment") in the Contingency Plan for Waste Accumulation Areas, July 2004.	Spill kit
Boot covers — disposable PVC or polyethylene	2 each	See Appendix A ("Personal Protective Equipment") in the Contingency Plan for Waste Accumulation Areas, July 2004.	Spill kit
Face shields	3 each	Protect against chemical splashes.	Spill kit
Safety goggles	3 each	Protect against chemical splashes.	Spill kit
Tape – 2-in. duct	1 roll	Seal protective suits, gloves, and containers.	Spill kit
Tape – HAZARDOUS WASTE AREA	1 roll	Cordon off incident area and alert personnel of hazard.	Spill kit
Marker – permanent, waterproof	1 each	Label containers.	Spill kit
pH test paper	1 each	Quickly determine if material is acidic or alkaline.	Spill kit
Wipe (Kimwipe or equivalent)	1 box	Absorb water, solvents, and oils.	Spill kit

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Table D-4. Emergency Equipment

Equipment	Quantity	Use	Location
Eyewash	1 each	Flush eyes for 15 min.	Along wall of B-515 near northeast corner of WAA
Deluge shower	1 each	Flush exposed area for 15 min.	Along wall of B-515 near northeast corner WA
Type ABC fire extinguisher	1 each	Extinguish or control small electrical or flammable liquids fires. LLNL Fire Department must be called if a fire occurs.	Northeast corner of the WAA
Drum dolly	1 each	Move drums.	West side of WAA
Dolly	1 each	Move various sized containers of waste.	West side of WAA
5-gal DOT cans with lids	2 each	Contain released waste and absorbent material.	Spill kit
55-gal drum	1 each	Contain released waste and absorbent material.	West side of WAA

D4.2 Communication Equipment

A telephone is located along the wall of B-515, near the northeast corner of the WAA. Most other buildings in the area are also equipped with telephones.

D5. EVACUATION ROUTE AND ASSEMBLY POINT

Evacuation from the B-515 WAA is through the west side of the WAA. See **Figure D-3** for the location of the evacuation route and assembly point. After evacuation, personnel should gather at the assembly point located at Avenue G, northeast of Building 511 (see **Figure D-3**).

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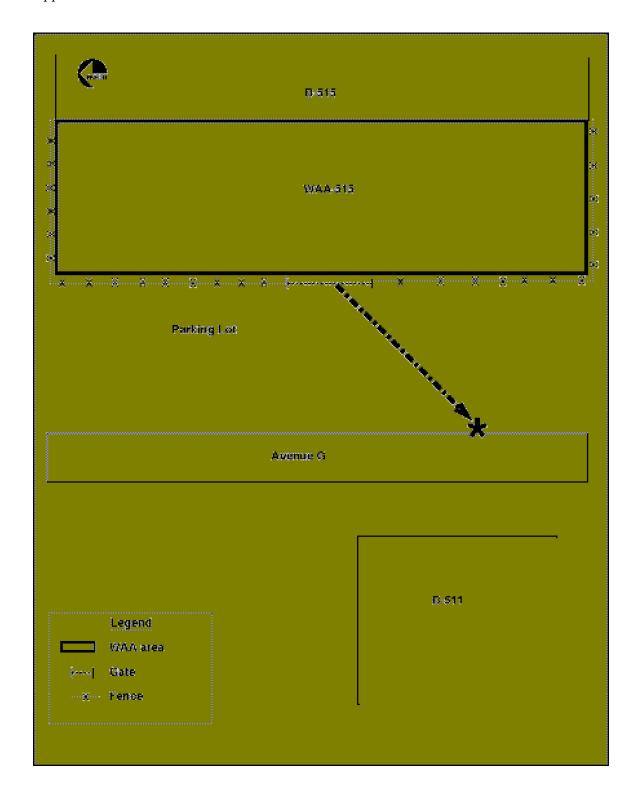


Figure D-3. The Building 515 WAA Evacuation Route

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